

REMARKS

Applicants appreciate the Examiner's thorough consideration of the above-identified application. In response to the Examiner's request, Applicants submit the following amendments and remarks.

The drawings are objected to under 37 C.F.R. 1.83(a). Examiner requested that "the pin **rotated** into the locked position must be shown".

Applicants believe that this feature is shown and described in the specification. Applicants refer to Figures 19, 20 and present paragraph 46. In that paragraph Applicants indicate that :

With reference now to Figure 19, when the pin 150 is moved to aperture 76, the diameter of radiused portions 160 is less than the diameter of aperture 76, and therefore the pin can be rotated in the clockwise sense as viewed in Figure 19, by one-quarter turn, to the position in Figure 20, where each of the flat edges 158 abut stop edges 82, and one of the flat edge 158 is trapped against edge 86 (Figure 8) of latch arm 80.

Thus Applicants believe that this feature is presently shown and described and would appreciate the Examiner acknowledgement of the same.

The Examiner rejected claims 12-26 under 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point and distinctly claim the subject matter which applicant regards as the invention. In particular, the Examiner indicated that in the first paragraph of claim 12 the substrate is recited as having an aperture portion, receiving portion, and locking portion. In the last paragraph the Examiner indicated that the substrate is recited as having an alignment member. The Examiner indicates that the last limitation in claim 12 also recites that the alignment member is insertable into the receiving opening (portion) and is located in the locking portion and that therefore the claim recites that the substrate is insertable into itself. Applicants respectfully disagree.

Claim 12 relates to an LGA interconnect including a plurality of components; one of which is the substrate, one of which is a plurality of contact assemblies, one of which is a frame, and one of which is alignment members. These components comprise the LGA interconnect, and nowhere is it indicated that the alignment members are part of the substrate.

The Examiner also rejected claims 12-15 and 17-18 under 37 U.S.C. §102(b) as being anticipated by Chan et al. The Examiner indicates that Chan discloses an LGA interconnect (in Fig. 2) for interconnection to further electrical components, said LGA interconnect comprising: a substrate (36, 36a) having an array of contact receiving openings (37) and the substrate having a receiving aperture (38) the receiving aperture having a receiving portion which transitions into a locking portion (38a), a plurality of contact assemblies positioned and retained in said substrate (Fig. 4); a frame housing (Fig. 6) positioned around a periphery of said substrate (Fig. 1b); alignment members (78) projecting from said substrate (3), and extending through said frame housing for aligning said substrate relative to at least one of the electrical components, the alignments members being insertable into said receiving openings and locked in place in said locking portion (Figs. 3 and 4). Applicants respectfully disagree with the characterization of Chan as it relates to applicants' invention.

This is the exact type of interconnection that applicants have improved upon. In Chan, the contacts are positioned on modules 10 and 10A yet the modules have no means for aligning the contacts directly with the integrated circuit chip. Granted, Chan includes a pair of module locator assemblies 36 and 36A, however the addition of these module locators adds to the tolerance stack up of the assembly. Applicants, in Claim 12, having claimed that the LGA interconnect has a substrate (which is shown at reference number 6 in Fig. 3), and includes a plurality of contact assemblies 8. The substrate includes a receiving aperture (reference number 72 shown in Fig. 8), having a receiving portion which transitions into a locking portion 80. A frame 4A, 4B is positioned around a periphery of the substrate and finally aligning members 150 project from the substrate (as best shown in Fig. 18) and extend through the frame housing as best shown in Fig. 21 to align the substrate relative to at least one electrical component. Thus rather than having plural members, to which and through which, alignment members are assembled as in Chan, applicants having provided the alignment members 150 on the same substrate as that which contains the contact elements 8. In this manner, the contact assemblies can be precisely aligned with further electrical components. Thus there is no anticipation of applicants' Claim 12 by Chan nor is there any suggestion to modify it to include such an assembly. Furthermore, applicants believe that Claims 12 through 26 are allowable as filed and respectfully request early passage thereof.

In the event that Applicants have overlooked the need for an extension of time or a payment of fee, Applicants hereby conditionally petition therefore and authorize that any charges be made to Deposit Account No. 02-0390, BAKER & DANIELS.



Eric J. Groen, Reg. No. 32,230
Attorney for Applicants
BAKER & DANIELS LLP
300 North Meridian Street, Suite 2700
Indianapolis, IN 46204
Telephone: (317) 237-1066
Fax: (317) 237-1000